

**ABSTRACT**

A device for submerging scrap metal includes: (a) a drive source, (b) a drive shaft having a first end and a second end, the first end being connected to the drive source, and (d) an impeller connected to the second end of the drive shaft, the impeller preferably having two or more outwardly-extending blades. Preferably, each of the blades has a portion that directs molten metal at least partially downward. The impeller design leads to lower operating speeds, lower vibration, longer component life and less maintenance. Additionally, the impeller preferably has a connective portion. The connective portion is used to connect the impeller to the shaft and preferably comprises a nonthreaded, tapered bore extending through the impeller.